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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,053	01/10/2006	Andreas Ewald Heinrich Bernard	W1.2389 PCT-US	5769

7590 07/17/2008
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EXAMINER

BANH, DAVID H

ART UNIT	PAPER NUMBER
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2854

MAIL DATE	DELIVERY MODE
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07/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,053	Applicant(s) BERNARD ET AL.	
	Examiner DAVID BANH	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 87-133 is/are pending in the application.
- 4a) Of the above claim(s) 88-101, 108-121, 123, 125, 127 and 129-133 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 87, 102-107, 122, 124, 126 and 128 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/10/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I in the reply filed on May 23, 2008 is acknowledged. The traversal is on the ground(s) that the claims are found within the same class and subclass and that the restriction is based on a method versus apparatus restriction. This is not found persuasive because the applicant recites several different non-obvious variants of the invention connected by linking claim 87. Additionally, the applicant appears to have misinterpreted the restriction requirement as it is not based on a method as opposed to apparatus claim distinction.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 87, 102, 104-107, 122 and 124 are rejected under 35 U.S.C. 102(b) as being anticipated by Siler (US PG Pub 2003/0010235).

For claim 87, Siler teaches a method of affecting a fan-out effect of a printed image on a web including: providing a web having a web width and having a printed image (page 3, paragraph 25, **12**), providing image points of two printed image (page 4, paragraphs 32-34, register mark pattern **50**), providing a sensor (page 3, paragraph 30, imaging device **30**), using the sensor to detect image points over at least a quarter of said web width (page 3, paragraph 30, page 4, paragraphs 32-34, see Figure 2, sensor

detects image points and image points are patterned in any method including over entire web), providing image data of a defined color from a print pre-stage (see abstract, lines 14-20), using said print pre-stage data as a reference position (see abstract, lines 14-20), comparing image points in respect to their axial positions on the web with said reference position (page 9, paragraph 71, **136**), determining a deviation of said image points from said reference position (page 9, paragraphs 71-72, **136**), providing an actuating member for affect fan-out effect (page 9, paragraph 73, **26**) and actuating the member when the deviation exceed a print value (page 9, paragraph 72-73, **138**, in this instant case, any non-zero deviation result in the actuating member employing a correction).

For claim 102, several images are evaluated and compared with the register mark reference position data (see Figure 3).

For claim 104, the scanning width includes the center of the web (see Figure 2 for the positions of the registration marks that are imaged). The lateral registration error of the image area is determined from its nominal position in the web center (page 9, paragraph 71, center points are used to determine variance).

For claim 105, the registration errors of the image area outside of the center area may be determined by extrapolating lateral deviations from nominal positions at the web center (page 9, paragraph 71, registration correction values may be generated based on a variance of the other center points from a reference centerpoint)

For claim 106, the process uses the image data of the center point of the registration mark reference data (page 9, paragraphs 71-72), which is a nominal position of the reference printout.

For claim 107, the image data from the pre-printing stage is used as a nominal position (image data is used as reference data for **136**, **138** and in abstract, lines 14-20).

For claims 122 and 124, the register mark pattern **50** comprising the image points that are sensed by the camera can encompass the entire width of the web (see Figure 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 103 rejected under 35 U.S.C. 103(a) as being unpatentable over Siler (US PG Pub 2003/0010235) in view of Lewis, JR et al. (US PG Pub 2004/0163562).

Siler teaches all of the limitations of claim 103 as found in claim 102. Siler does not teach sensing a lateral registration error and subtracting said lateral registration error from said separation image point. However, Lewis, JR. et al. teaches sensing additional sources of registration error, including registration errors and excluding them from the fan-out registration correction (page 20, paragraph 356). It would have been obvious to one of ordinary skill in the art at the time the invention was made to sense lateral registration error as taught by Lewis JR. et al. and subtract it from the separation image point for the purpose of being able to determine more accurately what the fan-out registration error is so as to correct it.

6. Claim 126 rejected under 35 U.S.C. 103(a) as being unpatentable over Siler (US PG Pub 2003/0010235) in view of Ingalls et al. (US Patent 5,022,950).

Siler teaches all of the limitations of claim 126 as found in claim 87. Siler is silent as to the type of camera used for sensing. However, Ingalls et al. teaches the use of a line camera for sensing registration marks (column 5, lines 65-68, column 6, lines 1-20, **520**). It would have been obvious to one of ordinary skill in the art to use specifically a line scan camera as taught by Ingalls et al. for the camera in Siler as Ingalls suggests that a line scan camera is adapted to sensing registration marks.

7. Claim 128 is rejected under 35 U.S.C. 103(a) as being unpatentable over Siler (US PG Pub 2003/0010235) in view of Wolfe (Invention Registration H1616).

Siler teaches all of the limitations of claim 128 as found in claim 87. Siler is silent as to the type of camera used for sensing. However, Wolfe teaches the use of a planar sensor (column 1, lines 38-50, area scan camera) as prevalent for inspecting webs (see also claim 11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a planar sensor as suggested by Wolfe as a planar sensor is adapted to detecting along a flat sheet of material such as a web.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID BANH whose telephone number is (571)270-3851. The examiner can normally be reached on M-Th 9:30AM-8PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571)272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 8, 2008

/Daniel J. Colilla/
Primary Examiner
Art Unit 2854

DHB